

GROUND WATER QUALITY PROTECTION

matching grants and contracts with the USGS. Most of the states call on the regional EPA laboratories for assistance from time to time with special problems. However, assistance from federal laboratories does not eliminate the need for a state laboratory.

Many states do not have the capacity to monitor organics in ground water without assistance from private laboratories. For that reason states such as Kansas, California, and Wisconsin have turned to the certification of private laboratories. While numerous examples could be given of state certification programs, programs from Kansas and Wisconsin are discussed here.

Kansas In 1974-1975, Kansas began to certify laboratories for specific procedures required for the analysis of water and air. Two professionals manage the program with the equivalent of half-time travel for each to make on-site evaluations. In addition to private laboratories, those of large public utilities are certified for some tasks.

The Kansas laboratory is supported by fees and general state revenue. In addition, the state has used a substantial part of its EPA Safe Drinking Water Act funds to buy equipment. The capacity for analyzing volatile organic chemicals has increased 30-fold in two years. Laboratory expansion was included in the State Water Plan as well as in the program documents of the Department of Health and Environment. Being included in the plan has made funding for new equipment easier to obtain.

Much information is available on inorganics in ground water, but knowing where to find it may be a problem. The state geologist has tried unsuccessfully to get legislative support for developing a comprehensive, integrated data collection program. Kansas is moving toward a decentralized data system with a central contact point and toward a system to give feedback on program effectiveness. In general, most data for recent years are available from WATSTOR or STORET, the two national data bases for chemical quality.

Kansas counties have been required to have solid waste disposal plans for 15 years. Most use landfills for disposal, and those judged most likely to leak have monitoring wells. The oil and gas data base is much improved through industry-funded contracts and support. A contractor supplies data and analysis for all oil and gas drilling in the state and compares them with similar data from the other oil-producing states. Historical data begin in the 1950s, with some variation in startup dates between the counties. The records provide extensive data on stripper wells (those that produce less than 10 barrels per day), projecting trends, giving types of wells, showing changes in production and sales, and analyzing taxes paid. Stripper wells produce the most salt water for each barrel of crude, yet produce the least income. Hence, they require the most surveillance to assure that brine does not get